

**THE APPLICATION OF FASKEN OIL AND RANCH LTD TO CONSIDER UNITIZATION AND SECONDARY RECOVERY AUTHORITY FOR THE MATI RAE SPRABERRY UNIT IN THE MATI RAE (SPRABERRY) FIELD, DAWSON COUNTY, TEXAS**

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**HEARD BY:** Andres J. Trevino P.E., Technical Examiner  
Christopher Hotchkiss, Hearings Examiner

**DATE OF HEARING:** January 5, 2011

**APPEARANCES:**

Dick Marshall  
**Via Telephone:**  
Aaron Dover  
Harry Nutter

**REPRESENTING:**

Fasken Oil and Ranch LTD.

**EXAMINERS' REPORT AND RECOMMENDATION**

**STATEMENT OF THE CASE**

Fasken Oil and Ranch LTD requests Commission authority for unitization of the Mati Rae Spraberry Unit and approval of secondary recovery operations on the Unit in the Mati Rae (Spraberry) Field.

This application was unopposed and the examiners recommend approval.

**DISCUSSION OF THE EVIDENCE**

The Mati Rae (Spraberry) Field was discovered in July 2006 at an approximate depth of 7,700 feet. There are six wells completed in the field since its discovery. Currently Fasken is the only operator and operates the two leases in the Mati Rae (Spraberry) Field.

The area proposed for the subject unitization covers acreage that includes the entire of the productive reservoir. The reservoir limits are well defined by a stratigraphic trap and sand thickness isopach map. The boundaries are confirmed by dry holes surrounding the reservoir. The Unit is believed to include both drained and undrained areas. Mineral and working interest owners of productive areas were given an opportunity to participate in the unit on the same yardstick basis as those interest owners agreeing to participate in the unit. Cumulative primary production from the six wells in the Unit Area is 157,015 BO, or 7.6% of the 2.059 MMBO original oil in place (OOIP). There is approximately 353,800 BO

remaining under primary production from the wells. The expected total primary production is 510,843 BO or 24.8% of the OOIP. Secondary production is estimated at 255,712 BO.

The unitized formation is the subsurface portion of the Unit commonly known as the Mati Rae (Spraberry) Field. The formation is described as the Upper Spraberry Formation. Within the Spraberry, the Lower Gin Sand found between 7,452 feet and 7,478 feet is the productive interval in the Hawkins 14, Well No. 1. The Upper Spraberry Formation is encountered in the interval from 6,996 feet to 7,700 feet on the Fasken's Hawkins 14, No. 1, (API No. 42-115-33157) located in the T & P RR Co./Wristen, J. Survey, A-1176, Section 14, Dawson County, Texas. The Lower Gin Sand is found in all wells throughout the Unit Area. The Lower Gin Sand's average porosity is 18.8% and average water saturation is 15.6%. Fasken plans to waterflood the Unit Area by utilizing three producing wells and three injection wells. Fasken will convert two producing wells and one temporarily abandoned well to injection wells. Fasken will use produced Spraberry salt water and produced Wolfcamp salt water from the adjacent Los Ybanes Spraberry Unit operated by Fasken.

The proposed Mati Rae Spraberry Unit consists of 2 tracts which contain a total of 290 acres. There are approximately 168 productive acres in the proposed unit area. The participation formula is based on 50% of the original oil in place underlying each tract in the Unit area and 50% of the ultimate primary recovery from each tract in the Unit area. The Unit Agreement has been ratified by 98.93% of the royalty interest ownership and 100% of the working interest ownership. There are no state lands in the Unit Area.

It is estimated that the total cost to implement the project will be \$1,200,000. Secondary reserves are estimated to be 255,712 BO. The estimated net profit before income tax is \$3.95 million at \$83/bbl.

### **FINDINGS OF FACT**

1. Notice of this hearing was sent to all operators and interest owners within the proposed unit and to offset operators and mineral owners of unleased tracts. Notice was also published in *Lamesa Press Reporter*, a newspaper of general circulation in Dawson County, for four consecutive weeks beginning November 21, 2010. There were no protests to the application.
2. The proposed unit consists of 2 tracts which contain a total of 290 acres.
3. The unitized formation is the subsurface portion of the Unit Area commonly known as the Mati Rae (Spraberry) reservoir. The formation is described as the Upper Spraberry. The Upper Spraberry Formation is encountered in the interval from 6,996 feet to 7,700 feet on the Fasken Oil and Ranch LTD's, Hawkins 14, No. 1, (API No. 42-115-33157) located in the T & P RR Co./Wristen, J. Survey, A-1176, Section 14, Dawson County, Texas.

4. Secondary recovery operations will result in the recovery of an estimated 255,712 BO which would otherwise go unrecovered.
5. The cost to implement the project does not exceed the value of additional reserves to be recovered.
6. The participation formula is based on 50% of the original oil in place underlying each tract in the Unit area and 50% of the ultimate primary recovery from each tract in the Unit area.
7. The secondary recovery project will not be successful unless the area is unitized.
8. The secondary recovery program will use produced Spraberry salt water and produced Wolfcamp salt water.
9. The agreement was voluntarily executed by all parties affixing their signatures thereto and no person has been compelled or required to enter into the agreement. The unit agreement binds only those persons who have executed it, their heirs, successors, assigns and legal representatives. The rights of all owners of interests in the field will be protected under the operation of the unit, regardless of whether an owner signed the unit agreement.
10. The owners of interest in the oil and gas under each tract of land within the area reasonably defined by development have been given an opportunity to enter into the unit on the same yardstick basis as owners of interest in the oil and gas under the other tracts in the unit.
11. The proposed injection program will move hydrocarbons across lease lines, and unitization is necessary in order to protect the correlative rights of the various interest owners.
12. The unitization agreement is necessary to accomplish the purposes of establishing a unit to effect secondary recovery operations and to operate the necessary cooperative facilities. Other available or existing methods or facilities for secondary recovery operations are inadequate for the purpose of secondary recovery.
13. The unit agreement does not provide, either directly or indirectly, for the cooperative refining or marketing of crude petroleum, distillate, condensate, or gas, or any by-product thereof.

14. The unit agreement is subject to all valid orders, rules and regulations of the Railroad Commission.
15. The unit agreement contains no provision regarding field rules, nor does it limit the amount of production of oil or gas from the unitized area. The unit agreement does not release the operator from his obligation to reasonably develop lands or leases as a whole.
16. The unit agreement is a voluntary agreement entered into for the purpose of conducting secondary recovery operations.
17. The unit agreement does not provide for the location of wells.
18. There are no State lands in the unit.
19. The reservoir described in the unit agreement is a suitable reservoir for the proposed secondary recovery operation.
20. The unit agreement contains only the acreage reasonably necessary to accomplish the proposed secondary recovery project.
21. The unit agreement has been ratified by 100% of the working interest ownership and 98.93% of the royalty interest ownership.
22. On tracts where 100% sign-up is not attained, the applicant will continue to use existing lease production facilities to account for production from that tract and/or will conduct monthly well tests to account for production from that tract.

#### **CONCLUSIONS OF LAW**

1. Proper notice was given to all persons legally entitled to notice.
2. All things have occurred or have been accomplished that are necessary to give the Commission jurisdiction in this matter.
3. Applicant's proposed secondary recovery project satisfies all of the requirements set out in TEX. NAT. RES. CODE ANN. §§101.001 et seq. (Vernon 2010).
4. Approval of the proposed unit agreement and secondary recovery operations is in the public interest and is necessary to prevent waste and to promote the conservation of oil or gas or both.

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend approval of the proposed Mati Rae Spraberry Unit and secondary recovery operations project as set out in the attached order.

Respectfully submitted,

Andres J. Trevino  
Technical Examiner

Christopher Hotchkiss  
Hearings Examiner